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Radius of the Project

## **6.12 SOCIOECONOMIC RESOURCES**

This section describes the socioeconomic setting of the area potentially affected by the Project and includes a discussion of the potential socioeconomic impacts resulting from Project construction and operation. LORS and agency contacts relevant to socioeconomics, proposed mitigation measures, and a discussion of permits required for the Project are also discussed in this section.

Socioeconomic issues relevant to the evaluation of environmental impacts include labor force, employment, and income; population and housing; public finance and fiscal issues; schools; and public services, and utilities (including fire protection, emergency response services, law enforcement, schools, medical services, and utilities).

The Project Site is located within the City of El Centro, in Imperial County, a county with low population and employment density. The City of El Centro is the most populated city and the economic center of Imperial County.

### **6.12.1 Affected Environment**

This SPPE Application is for the construction and operation of the ECGS Unit 3 Repower Project. The Project will be owned and operated by IID (“the Applicant”) and will utilize existing staffing at the ECGS. IID is an irrigation district established under Division 11 of the California water code, Sections 20500 et seq., that provides electrical power, non-potable water, and farm drainage services to the lower southeastern portion of the California desert, primarily in Imperial County. ECGS Unit 3 will continue to serve the growing electrical load demands of the region.

The Project consists of replacing the existing CE boiler with a GE Frame 7EA dry low NO<sub>x</sub> CTG and HRSG to supply steam to the existing Westinghouse STG. The generator output from the Unit 3 Repower Project will be stepped-up to transmission voltage and interconnected to the existing IID El Centro Switching Station also located within the ECGS Site.

Most of the existing ECGS systems will continue to be used with only minor modifications. Systems that will continue to be used include the STG, cooling system, water treatment system, water supply system, control room, fire system, ammonia system, site access during operations, and electrical El Centro Switching Station.

The Project consists of two major project areas:

- Project Site – new Unit 3 CTG/HRSG, minor modifications to the existing Unit 3 cooling tower, replacement of the Unit 3 condenser, minor modifications to Unit 3 STG, the 92 kV electrical interconnection and modifications to the existing gas interconnection facilities.
- Temporary Construction Area – construction parking, construction trailers, and construction laydown area.

The total Project disturbance will be 12.5 acres, all of which is within the ECGS Site.

The Project Site is located at the existing ECGS at 485 East Villa Avenue, in the City of El Centro in Imperial County. The City of El Centro is the county seat and the largest city in Imperial County.

This section describes existing economic and demographic conditions at varying geographic levels. Information is first presented for Imperial County, including the immediate Project vicinity and the City of El Centro. Next, information is presented for San Diego County and Riverside County because construction labor needs associated with the Project would be met by labor forces from both counties, west and north of Imperial County, respectively. Construction projects tend to attract workers from up to a 2-hour commute distance, and portions of San Diego and Riverside counties are within the 2-hour commute distance to the Project Site.

## **6.12.2 Economy: Labor Force, Employment, and Income**

### ***6.12.2.1 Imperial County***

The Project Site is located in the southwest region of Imperial County, south of the Salton Sea and approximately 7 miles north of the Mexican border. Imperial County contains 4,597 square miles of land (2.7% of California land) (ICCED 2003; Census 2005a) and borders Mexico on the south, Riverside County to the north, San Diego County on the west, and the State of Arizona on the east. The Colorado River forms the eastern boundary of Imperial County, as well as the Arizona-California border. The major east-west transportation route is Interstate 8, beginning in San Diego and continuing east to Arizona. State Routes 78, 86, and 111 also travel through Imperial County. The Project Site is located approximately 120 miles east of the City of San Diego.

#### ***Labor Force***

In 2004, the number of Imperial County labor force participants (59,900) had increased by 1.7% per year since 1990. The unemployment rate in Imperial County was approximately 17% in 2004, 0.4 percentage points lower than the 2000 rate, and 8.5 percentage points lower than the 1990 rate. Despite these decreases, unemployment remains high in Imperial County compared to other areas in California. The State of California 2004 unemployment rate of 6.2% is less than half the Imperial County rate (CEDD 2005a). Throughout 2004, unemployment rates ranged from 14.4% in February to 20.7% in July. This difference is likely attributable to the seasonal employment swings typical of the agricultural industry. The variability in employment levels results in a labor surplus during certain times of the year. However, apart from the influence of the agricultural industry, the unemployment rate in Imperial County is still substantially higher than in California as a whole and in the neighboring counties of Riverside (5.8%) and San Diego (4.7%).

#### ***Industry Employment***

Although the share of county employment that is farming employment decreased substantially during the 1990s, by 9 percentage points (Table 6.12-1, Labor Force, Employment, and Industry, Imperial County), the predominant industry in Imperial County remains agriculture (ICPBD 2005). Other important industries are government (which was the fastest growing industry in terms of employment in the 1990s), geothermal electric power plants, state prisons, retail trade, and services (ICPBD 2005).

**TABLE 6.12-1  
LABOR FORCE, EMPLOYMENT, AND INDUSTRY  
IMPERIAL COUNTY**

Measure	1990	2000	2004
Civilian Labor Force	47,400	56,100	59,900
Employment	35,300	46,300	49,700
Civilian Unemployment Rate	25.6%	17.5%	17.1%
<b>Percent of Employment, By Industry</b>			
Farming	33	24	20
Natural Resources, Mining, and Construction	5	4	3
Manufacturing	4	3	5
Trade, Transportation, and Utilities	18	19	20
Information	1	1	1
Financial Activities	3	3	3
Professional and Business Services	4	4	4
Educational and Health Services	4	4	5
Leisure and Hospitality	6	6	6
Other Services	2	2	2
Federal Government	2	4	4
State Government	<sup>1</sup>	5	5
Local Government	19	22	23

Source: CEDD 2005a.

Notes:

<sup>1</sup>In 1990, both state and local estimates were combined and are not available.

% = percent

Imperial County industries with the highest employment in 2004 were local government, farming, trade, transportation, and utilities. Construction employment in Imperial County in 2004 was grouped in the category of natural resources, mining, and construction; a category with approximately 1,700 employees that year (Table 6.12-1, Labor Force, Employment, and Industry, Imperial County; CEDD 2005a).

### Income

In 2003, wage and salary disbursements in Imperial County were \$1.6 billion, which represents 0.2% of California's 2003 wage and salary disbursements. The average wages per job were \$27,455, which was 33% lower than the same measure for the state (BEA 2005).

Total personal income in 2003 was approximately \$3.1 billion in Imperial County. Per capita income in 2003 was \$20,674 in Imperial County, approximately 38% lower than the same measure for California and ranking in the bottom 10 when compared to the other 57 California counties (BEA 2005). The median household income in Imperial County in 1999 (\$31,870) is 32% lower than the same measure for California. In addition, 23% of the Imperial County's

population lived below the poverty level in 1999, compared to 13% of California's population as a whole. Imperial County's population is poor when compared to other California counties (ICCED 2003). Imperial County has several colonias<sup>1</sup> within 150 miles of the Mexican border, home to very low-income families and individuals (USDA 2005).

### **Future Employment and Projects**

Between 2001 and 2008, employment in Imperial County is expected to grow by approximately 15%, for an average annual rate of 2.0%. Industries anticipated to grow the most over this period are manufacturing (6.2% per year) and construction and mining (4.0% per year). Construction and mining employment is anticipated to grow by 31.3% over the 7-year period 2001 to 2008 (CEDD 2005b). The City of Mexicali, Mexico, which is located immediately adjacent to the Imperial County border, has a population of approximately one million people. Many cultural facilities and international businesses exist in Mexicali, and include maquiladora assembly or manufacturing operations.<sup>2</sup> NAFTA is expected to benefit Imperial County in the long run<sup>3</sup> (IPD 2005).

### **Business Activity**

Over 2,200 business establishments existed in Imperial County in 1999. Approximately 39% of these were services establishments, and 31% were trade establishments. Eighty-seven percent of businesses had fewer than 20 employees, 97% had fewer than 50 employees, and all but seven businesses had less than 250 employees (CDOF 2005a). During high farming season, Imperial County becomes more active, and businesses experience higher revenues due to the influx of farm workers, and related demands for services, food, and temporary lodging.

The geothermal power industry in Imperial County employs over 285 people, most of whom are county residents, and results in over \$12 million in tax revenue for local government, schools, and special districts. Cal Energy, which is the largest of all geothermal companies in Imperial County, is also the largest taxpayer in the county (CEERT 2005).

### **Imperial County Agriculture**

The value of agricultural production in Imperial County ranks 11<sup>th</sup> out of all California counties (ICFB 2005; CDOF 2005a). The primary farming area is called the Imperial Valley, an 830-square-mile area extending from Mexico to the Salton Sea. The Imperial Valley has an extensive irrigation system, supplied with water from the Colorado River by IID (ICCED 2003).

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<sup>1</sup> Colonias are communities that lack basic services such as adequate roads, electricity, and water and sewer systems (USDA 2005).

<sup>2</sup> A maquiladora assembly or manufacturing operation can be partly or entirely owned and managed by non-Mexicans, and uses competitively-priced Mexican labor to assemble, process, or otherwise perform manufacturing operations. Mexican law allows these operations to bring in most capital equipment and machinery from abroad (ITDS 2005).

<sup>3</sup> Since the implementation of the North American Free Trade Agreement (NAFTA) in 1994, maquiladoras have increased their exports, production value, and workforces. Approximately 4,760 maquiladoras currently exist, most located around the Mexican border (ITDS 2005).

Imperial County has over 550 farms, encompassing over 480,000 acres. Agricultural employment in Imperial County in 2000 was 11,300, and the value of production that same year was \$919.6 million. Approximately 18% of the total land area in Imperial County was agricultural land in 2000 (CDOF 2005a). In 2003, the commodities with the highest share of agricultural value of production were cattle, alfalfa hay, leaf lettuce, and carrots (Table 6.12-2, Ten Leading Commodities in Imperial County, 2003).

**TABLE 6.12-2**  
**TEN LEADING COMMODITIES IN IMPERIAL COUNTY, 2003**

Commodity	Value (million)
Cattle	\$238,303
Alfalfa Hay	\$97,062
Leaf Lettuce	\$71,883
Carrots	\$60,163
Lettuce	\$59,338
Onions	\$57,981
Sugarbeets	\$46,520
Misc. Livestock	\$42,833
Cantaloupe	\$38,089
Wheat	\$33,249

Source: ICFB 2005.

### **6.12.2.2 Immediate Project Vicinity**

The ECGS, owned and operated by IID, has been in operation since the late 1940s and currently consists of four units. The Unit 3 Repower Project would be located adjacent to the existing Unit 3 boiler, on the west side of the existing ECGS building, and south of ECGS Unit 2. The CTG and HRSG would be installed within the boundaries of the ECGS Site.

The ECGS Site in general has elevated noise levels due to the urban location, the generation activities, and relatively high traffic levels are present around the ECGS Site. There are City of El Centro residents live and work near the ECGS Site. The closest residences are located in a neighborhood approximately 2,600 feet west of the Project Site. Land to the north of the ECGS Site is zoned agricultural and is also owned by IID. Land uses within 3 miles of the Project Site include agricultural, residential, light industrial, and commercial.

The ECGS is located southwest of the intersection of East Villa Avenue and Dogwood Road, within the El Centro city limits. The ECGS Site is relatively flat. Ongoing economic activity at the ECGS Site includes the generation and transmission of electricity by IID. Current staffing at the ECGS includes approximately 50 operations, maintenance, and management personnel.

These 50 positions are related to secondary economic impacts estimated at approximately 42 jobs, \$1.4 million in labor income, and \$4.1 million in output.<sup>4</sup>

### ***6.12.2.3 El Centro***

The City of El Centro is the largest city in Imperial County, as well as the county seat, and covers approximately 10.75-square miles. There are two international border crossings in Calexico, California. El Centro is located 120 miles east of San Diego and 245 miles west of Phoenix, Arizona. Mexicali, California is located approximately 7 miles south of the City of El Centro. El Centro is accessible via Interstate 8, State Highway 86 and State Highway 111 (EC 2005).

In the 1940s, the El Centro economy was based on agriculture; specifically fruit and vegetable packing and shipping, ice plants, a flax fiber plant, box factories, and concrete pipe and brick yards. In the 1980s, the government and trade industries became the two largest employment sectors, although agriculture still played a part (EC 2005). Currently, over 35 growers and shippers still operate in El Centro.

The largest employers in El Centro are the Centinela State Prison; Imperial County, IID, and the El Centro Naval Air Facility (ECCC 2005). In addition, several state and federal government offices are located in the City of El Centro, including BLM, Federal Bureau of Investigations, U.S. Border Patrol Headquarters, Social Security Administration, Employment Development Department, and USDA (EC 2005).

In 2000, El Centro labor force participants represented approximately 56% of the El Centro population over age 16, a measure that is less than the state average labor force participation rate of 64% the same year (Census 2005c). The unemployment rate in 2000 was 6.6%; substantially lower than the same measure for the county. Occupations with the highest employment in El Centro in 2000 were management, professional, and related occupations (29% of employment); sales and office occupations (25% of employment); and service occupations (21%). Industries with the highest employment levels were educational, health, and social services (24%); retail trade (12%); and public administration (12%). Over 2,000 firms existed in El Centro in 1997 (Census 2005a).

### ***6.12.2.4 San Diego County***

San Diego County contains the closest large metropolitan area to the Project Site. Construction projects in and around Imperial County may draw labor from San Diego County if local construction labor supply is short, or if union labor is used. The California Employment Development Department uses San Diego County to represent the San Diego-Carlsbad-San Carlos metropolitan area.

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<sup>4</sup> These secondary (indirect and induced) impacts were estimated using IMPLAN economic modeling software. IMPLAN Professional Version 2.0, copyright Minnesota IMPLAN Group, 1997. Output includes spending for materials and supplies (non-labor costs), plus value added, which comprises employee compensation, proprietary income, other property income, and indirect business taxes. IMPLAN sector number 30 ("power generation and supply") was used for this analysis.



Employment is highest in San Diego County in trade, transportation, and utilities (17% of employment); professional and business services (16% of employment); leisure and hospitality; local government; and educational and health services (Table 6.12-3, Labor Force, Employment, and Industry, San Diego County). Applying the industry-wide 2004 unemployment rate to construction employment in San Diego County, an average of over 4,000 construction workers could be unemployed at any one time.

**TABLE 6.12-3  
LABOR FORCE, EMPLOYMENT, AND INDUSTRY  
SAN DIEGO COUNTY**

	1990	2000	2004
Civilian Labor Force	1,215,700	1,376,700	1,490,300
Employment	1,159,300	1,322,700	1,420,000
Civilian Unemployment Rate	4.6%	3.9%	4.7%
<b>Percent of Employment, By Industry</b>			
Farming	1	1	1
Natural Resources and Mining	0	0	0
Construction	6	6	7
Manufacturing	13	10	8
Trade, Transportation, and Utilities	18	17	17
Information	2	3	3
Financial Activities	7	6	6
Professional and Business Services	13	16	16
Educational and Health Services	9	10	10
Leisure and Hospitality	11	11	11
Other Services	3	4	4
Federal Government	5	3	3
State Government	3	3	3
Local Government	10	11	11

Source: California Employment Development Department (CEDD) 2005a.

% = percent

Information and professional and business services were the fastest growing industries in the 1990s, while during the period 2000 to 2004, the trade, transportation, and utilities industry and the professional and business services industry were the fastest growing. Construction employment grew 1.0% per year on average during the 1990s, and 6.0% per year during the period 2000 to 2004 (CEDD 2005a).

San Diego County has a substantial labor force of approximately 1.5 million within 2- to 2.5-hour commute distance of the Project Site. This labor force represents approximately 8.5% of the state's labor force. The average annual increase in San Diego County's labor force was 1.3% between 1990 and 2000, and 2.0% during the period 2000 to 2004. San Diego County's

unemployment rate was approximately 4.7% in 2004, 1.5 percentage points lower than the state rate, indicating strength in employment relative to other areas in California (CEDD 2005a).

Between 2002 and 2012, employment in San Diego County is expected to grow by almost 20%, for an average annual rate of almost 1.8%. The professional and business services and other services sectors are anticipated to grow the most over this period. Construction employment is anticipated to grow by 21%, for an average annual increase of approximately 1.9% (CEDD 2005b).

In 2003, personal income in San Diego County was \$105 million, and per capita income was \$35,841. Personal income in San Diego County accounted for approximately 9% of total state personal income. The per capita income in San Diego County was 107% of the per capita income for the state as a whole (BEA 2005).

#### 6.12.2.5 Riverside County

Riverside County is located directly north of Imperial County. The county boundary is approximately 75 miles north of the Project Site. Construction projects in and around Imperial County may draw labor from Riverside County if local construction labor supply is short, or if union labor is used.

Employment is highest in Riverside County in trade, transportation, and utilities (19% of employment); local government (14% of employment); construction (13% of employment); and leisure and hospitality (11% of employment) (Table 6.12-4, Labor Force, Employment, and Industry Riverside County). Applying the industry-wide 2004 unemployment rate to construction employment in Riverside County, an average of over 4,000 construction workers could be unemployed at any one time.

**TABLE 6.12-4  
LABOR FORCE, EMPLOYMENT, AND INDUSTRY  
RIVERSIDE COUNTY**

	1990	2000	2004
Civilian Labor Force	536,900	680,900	810,600
Employment	498,300	644,500	763,800
Civilian Unemployment Rate	7.2%	5.4%	5.8%
<b>Percent of Employment, By Industry</b>			
Farming	5	4	3
Natural Resources and Mining	0	0	0
Construction	10	10	13
Manufacturing	10	11	9
Trade, Transportation, and Utilities	18	18	19
Information	2	1	1
Financial Activities	5	3	4
Professional and Business Services	8	9	10
Educational and Health Services	8	9	9

**TABLE 6.12-4  
LABOR FORCE, EMPLOYMENT, AND INDUSTRY  
RIVERSIDE COUNTY**

	1990	2000	2004
Leisure and Hospitality	12	12	11
Other Services	3	4	3
Federal Government	2	1	1
State Government	3	3	3
Local Government	14	14	14

Source: California Employment Development Department (CEDD) 2005a.

Trade, transportation, and utilities; and local government were the fastest growing industries both in the 1990s and during the period 2000 to 2004. Construction employment grew substantially, by 10% per year on average during the 1990s, and 13% per year during the period 2000 to 2004 (CEDD 2005a).

Riverside County has a substantial labor force of 810,600 within 1½- to 2½-hour commute distance of the Project Site. This labor force represents approximately 4.6% of the state's labor force. The average annual increase in Riverside County's labor force was 2.4% between 1990 and 2000, and 4.5% during the period 2000 to 2004. Riverside County's unemployment rate was approximately 5.8% in 2004, 0.4 percentage points lower than the state rate (CEDD 2005a).

Between 2002 and 2012, employment in Riverside County is expected to grow by almost 30%, for an average annual rate of 2.7%. The professional and business services; construction; and trade, transportation, and utilities industries are anticipated to grow the most over this period. Construction employment is anticipated to grow by 39%, for an average annual increase of approximately 3.4% (CEDD 2005b).

In 2003, personal income in Riverside County was \$44.6 million, and per capita income was \$25,032. Personal income in Riverside County accounted for approximately 4.0% of total state personal income. The per capita income in Riverside County was 75% of the per capita income for the state as a whole (BEA 2005).

### 6.12.3 Population and Housing

#### 6.12.3.1 Imperial County

Approximately 152,448 people lived in Imperial County in 2004. This population represented less than one-half of 1.0% of the California population that year (Census 2005a). The population density is 34 people per square mile of land area, compared to 217 people per square mile of land area in California as a whole, 670 in San Diego County, and 214 in Riverside County (Census 2005d).

The rate of population growth in Imperial County during the period 1990 to 2000 was over twice that of the State of California as a whole (Census 2005a). In future years, 2005 to 2020, the Imperial County population growth rate is expected to decline by approximately 0.7 percentage points when compared to the period 2000 to 2005. During that future period, Imperial County is

expected to grow faster than San Diego County and California as a whole, but slower than Riverside County (Table 6.12-5, Population Trends and Projections).

**TABLE 6.12-5  
POPULATION TRENDS AND PROJECTIONS**

Year	El Centro	Imperial County	San Diego County	Riverside County	State of California
1970	19,272	74,492	1,357,854	456,916	19,953,134
1990	31,405	109,303	2,498,016	1,170,413	29,758,213
2000	37,835	142,361	2,813,833	1,545,387	33,871,648
2005	41,030	161,800	3,051,280	1,877,000	36,810,358
2020	N/A	214,386	3,633,572	2,675,648	43,851,741
AARG, 1970-1990	2.5%	1.9%	3.1%	4.8%	2.0%
AARG, 1990-2000	1.9%	2.7%	1.2%	2.8%	1.3%
AARG, 2000-2005	1.6%	2.6%	1.6%	4.0%	1.7%
AARG, 2005-2020	NA	1.9%	1.2%	2.4%	1.2%

Source: Census 2005a; California Department of Finance (CDOF) 2005a.

Notes:

AARG = Average Annual Rate of Growth

NA = not applicable

% = percent

Over three-quarters of the population in Imperial County reside in the incorporated cities. Unincorporated Imperial County is home to 34,780 residents: 22% of the total population in Imperial County. Cities in Imperial County in order of population size include the City of El Centro (population 41,030), Calexico (population 36,274), Brawley (population 24,042), Imperial (population 9,567), Calipatria (population 7,904), Holtville (population 5,745), and Westmorland (population 2,444) (CDOF 2005b). The City of Mexicali is located immediately across the border and has a population of approximately 764,900 (ICCED 2003).

In January 2005, Imperial County contained 48,495 housing units, including 63% single-family homes, 21% multi-family homes, and 16% mobile homes. The vacancy rate at that time was 9.9% (Table 6.12-6, Housing, January 2005). An important housing issue in Imperial County is the need for rehabilitation and continued maintenance of the housing stock, especially those homes of low- to moderate-income families. Most new development is occurring in the incorporated cities (ICCED 2003). In terms of type of housing, Imperial County is similar to California except that Imperial County has more mobile homes and fewer multi-family units. Imperial County has the greatest percentage of mobile homes compared to San Diego and Riverside counties. Of the three counties, San Diego has relatively more multi-family units, while Riverside has more single-family units.

**TABLE 6.12-6  
HOUSING, JANUARY 2005**

<b>Location</b>	<b>Total Units</b>	<b>Single-Family</b>	<b>Multi-Family</b>	<b>Mobile Homes</b>	<b>Vacancy Rate</b>
City of El Centro	13,029	57.8%	32.1%	10.1%	6.69%
Imperial County	48,495	63.1%	20.9%	16.0%	9.9%
San Diego County	1,104,989	60.3%	35.4%	4.3%	4.4%
Riverside County	690,075	71.2%	16.7%	12.1%	13.3%
California	12,945,237	64.5%	31.0%	4.5%	5.9%

Source: California Department of Finance (CDOF) 2005c.

Notes:

% = percent

Approximately 13,029 housing units were located in the City of El Centro in 2005, including 58% single family units, 10% mobile homes, and 32% multi-family units. The housing vacancy rate was approximately 6.7% that year.

Home prices are substantially lower in Imperial County when compared to neighboring San Diego County. Over 90% of homes are valued between \$50,000 and \$399,999 in Imperial County. Riverside County's median value of owner-occupied homes is approximately 46% higher than the same measure for Imperial County. Home prices in California in general are also higher than homes in Imperial County. The El Centro Chamber of Commerce anticipates increases in development as southern California residents take advantage of the lower prices in Imperial County. With the new development, infrastructure and service improvements will be required, in order to accommodate the additional residents (ECCC 2005).

Homes in the City of El Centro are generally more expensive when compared to the average Imperial County home (Table 6.12-7, Housing Values, 2000). The median value of a home in El Centro is 4.0% higher than the median value of a home in Imperial County.

**TABLE 6.12-7  
HOUSING VALUES, 2000**

<b>Location</b>	<b>Percent &lt;\$49,999</b>	<b>Percent \$50,000- \$149,000</b>	<b>Percent \$150,000- \$399,999</b>	<b>Percent \$400,000- \$759,999</b>	<b>Percent &gt;\$760,000</b>	<b>Median Value</b>
City of El Centro	3.2	82.3	14.2	0.0	0.3	\$104,300
Imperial County	6.0	77.5	15.8	0.3	0.4	\$100,000
San Diego County	0.7	15.7	68.5	11.7	3.7	\$227,200
Riverside County	1.6	50.6	43.9	3.0	0.9	\$146,500
California	1.6	27.0	53.0	13.7	4.8	\$211,500
CT 101	30.1	68.4	1.7	0.0	0.0	\$70,700
Niland CDP	67.8	32.2	0.0	0.0	0.0	\$44,600

Source: Census 2005e.

Notes:

< = less than

> = greater than

El Centro has over 30 temporary lodging places with over 700 rooms.<sup>5</sup> While occupancy rates tend to be high (over 70%) in San Diego County due to the plentiful tourist attractions, rates in Imperial County are likely much lower. Assuming half of the rooms in El Centro are available during high farming season, and applying a general occupancy rate of 50%, an estimated 175 rooms would be available at any one time. To the extent occupancy rates are less than 50% and that farm workers are not staying in lodging facilities,<sup>6</sup> more rooms would be available.

### ***6.12.3.2 Immediate Project Vicinity***

The closest residential uses to the Project Site are residential neighborhoods approximately 0.5 mile to the west of the Project Site. The ECGS is located in an urban area, surrounded by not only residential, but also commercial, industrial, and agricultural uses. Homes closest to ECGS are mostly tract homes built in the 1950s to 1960s.<sup>7</sup> The homes are single-story, and near a park and ball field.

The population of the City of El Centro is approximately 41,030 living in 13,029 housing units. The population grew by 9,625 people (31%) between 1990 and 2005, at a slower rate when compared to Imperial County population.<sup>8</sup>

### ***6.12.3.3 San Diego County***

Population in San Diego County was 3 million in 2005, and grew at an average annual growth rate of 3.1% between 1970 and 1990, 1.1% faster than statewide population growth that period, and 1.2% in the 1990s, slightly slower than the state. During the period 2000 to 2005, San Diego County population grew 1.6% per year, again slightly slower than the state. The percentage of state population residing within San Diego County grew from 6.8% in 1970 to 8.3% in 2005 (CDOF 2005a). Table 6.12-5, Population Trends and Projections, shows historical and projected population for San Diego County.

Anticipated growth of San Diego County population during the period 2005 to 2020 is 19.1%, for an average annual rate of 1.2%, the same as the state for that period (CDOF 2005a).<sup>9</sup>

The City of San Diego in San Diego County, the largest city in the county by a factor of six, had a population of 1.3 million in 2005. The cities of Chula Vista, Oceanside, and Escondido each had between 140,000 and 220,000 residents in 2005. The remaining 14 cities in San Diego County each had less than 100,000 residents in 2005 (CDOF 2005b).

In 2005, San Diego County contained 1.1 million housing units. The housing stock consisted of 60% single-family homes, 35% multi-family homes, and 4.0% mobile homes. The vacancy rate at that time was 4.4% (CDOF 2005c). San Diego County is a major metropolitan area, containing the second largest city in California and hundreds of temporary lodging places.

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<sup>5</sup> Based on telephone and web research.

<sup>6</sup> The number of farm workers requiring lodging increases during high farming season.

<sup>7</sup> The age of the homes was estimated based on historical aerial photographs from 1959 and 1965.

<sup>8</sup> Between 1990 and 2003, Imperial County population grew 38.6%.

<sup>9</sup> Note that forecasts were made prior to 2005, so therefore may not reflect economic activity in late 2004 or 2005.

### *6.12.3.4 Riverside County*

The Riverside County population in 2005 was 1.9 million, reflecting an average annual growth rate of 4.8% between 1970 and 1990, 2.8% higher than statewide population growth that period, and 2.8% in the 1990s, also substantially higher than the state rate. During the period 2000 to 2005, Riverside County population grew 4.0% per year, again faster than the state.

The percentage of state population residing within Riverside County grew from 2.3% in 1970 to 6.1% in 2005 (CDOF 2005a). Table 6.12-5, Population Trends and Populations, shows historical and projected population for Riverside County.

Anticipated growth of Riverside County population during the period 2005 to 2020 is 43%, for an average annual rate of 2.4%, a slightly lower rate when compared to the period 2000 to 2005, but twice the rate of the state for the same period (CDOF 2005a).<sup>10</sup>

The three largest cities in Riverside County are Riverside (population 285,540), Moreno Valley (population 165,330), and Corona (population 144,100). Eleven Riverside County cities have a population between 30,000 and 86,000. The remaining 10 cities are each home to 29,000 residents or less. The smallest city in Riverside County, Indian Wells, has 4,780 residents (CDOF 2005b).

In 2005, Riverside County contained 690,100 housing units. The housing stock consisted of 71% single-family homes, 17% multi-family homes, and 12% mobile homes. The vacancy rate at that time was 13.3% (CDOF 2005c). Riverside County contains hundreds of lodging facilities located throughout its 24 cities.

## **6.12.4 Public Services and Utilities**

### *6.12.4.1 Fire Protection and Emergency Response*

The ECFD serves the City of El Centro (41,030 people) and employs 37 people, including 33 suppression line personnel and 4 administrative suppression personnel. Eighteen staff members are Emergency Medical Technicians. The ECFD responds to fire protection, emergency, and hazard calls for service. Services include fire suppression; basic and advanced life support; fire prevention, consulting, and investigative services; community disaster preparedness; hazardous materials response and mitigation; confined space rescue services; and water rescue. The ECFD operates two stations, at 775 State Street (with the administrative offices; 2.5 miles southwest of the Project Site), and 900 South Dogwood (1.5 miles south of the Project Site). The ECFD also operated a Fire Prevention Office at the 900 South Dogwood location. The ECFD has mutual aid agreements with all other Imperial County departments, and the ability to call on fire protection agencies outside the county for assistance when needed, under the California Emergency Response Plan (Reel 2006; ECFD 2006).

The majority of staff is located at the State Street station, with three to four staff at the South Dogwood station. Equipment at the State Street station includes two front-line engines, one reserve engine, and one medical aid unit. Equipment at the South Dogwood station includes one front-line engine, one reserve engine, one truck company, and one rescue squad (Reel 2006).

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<sup>10</sup> Note that forecasts were made prior to 2005, so therefore may not reflect economic activity in late 2004 or 2005.

Gold Cross Ambulance is located at 905 South Imperial Avenue in El Centro, approximately 3.5 miles from the Project Site. Gold Cross Ambulance is a division of Schaefer Ambulance, which provides ambulance service from locations in southern California.

#### ***6.12.4.2 Law Enforcement***

The El Centro Police Department (ECPD) provides public safety and law enforcement services to the City of El Centro, including the Project Site. The ECPD headquarters are located at 150 North 11<sup>th</sup> Street, in the City of El Centro, approximately 2.5 miles southwest of the Project Site. The ECPD employs 49 sworn officers, including one chief of police, one captain, two lieutenants, seven sergeants, and 38 police officers. The department has 23 civilian employees assigned to Records, Communications, Evidence, Animal Control, Crime Prevention, Community Service Officer Department, Crime Analysis Unit, Computer Information Services, and Parking Enforcement. The Department also has a Community Oriented Police Office, Crime Prevention Specialist, Training Office, and Volunteer Services Office located at the Community Center (375 South 1<sup>st</sup> Street, 3.5 miles east of the site) (Merideth 2006; ECPD 2006).

The ECPD has mutual aid agreements with all other Imperial County law enforcement agencies, and the ability to call on law enforcement agencies outside the county for assistance when needed, under the California Emergency Response Plan (Merideth 2006). Other law enforcement agencies within Imperial County include the Imperial County Sheriff's Office. The cities of Imperial, Brawley, Calexico, Calipatria, Holtville, and Westmorland each have a municipal police department (CPOST 2005).

The CHP enforces law on state roads in Imperial County, and maintains offices in El Centro (El Centro Dispatch Center at 2331 Highway 86 in Imperial) and in Calexico (Calexico Inspection Facility at 1700 East Carr Road in Calexico). The CHP provides traffic enforcement and accident investigations throughout the county (CHP 2005).

The United States-Mexico border is patrolled by the U.S. Immigration and Border Patrol. Two ports of entry exist in the City of Calexico in Imperial County: Calexico West and Calexico East.

#### ***6.12.4.3 Schools***

Seventeen school districts provide educational services to Imperial County families. These districts include 37 elementary schools, eight high schools, and six adult schools. The Imperial County Office of Education serves as an intermediary between the school districts and the State Department of Education. Services provided in Imperial County include Special Education, Migrant Education, Youth Employment Services, and the Regional Occupation Program (ICGP 2003).

Three school districts serve the El Centro area: McCabe Union Elementary School District (grades K through 8) provides services outside the city limits; El Centro Elementary School District (grades K through 8); Central Union High School District (grades 9 through 12), and Southwest High School (grades 9 through 12), the Project Site is located within the boundaries of the El Centro Elementary School District and the Central Union High School District. The schools closest to the Project Site are Washington School (223 South 1<sup>st</sup> Street; grades K through 6) which is 1.4 miles southwest of the site, and Kennedy Middle School (900 North 6<sup>th</sup> Street;



grades 7 and 8) which is 1.7 miles southwest of the site. The remaining schools are over 2 miles from the site (ECCC 2005).

Enrollment in McCabe Union Elementary School District was 595 students for the year 2004-2005, and has increased slightly since 1993-1994, when enrollment was 538 students. That same year, the El Centro Elementary School District enrollment was 6,128 students, reflecting a decrease since 1993-1994 of 335 students. During the year 2004-2005, enrollment in the Central Union High School District was 4,129, reflecting an increase of 910 students since the 1993-1994 school year. Total 2004-2005 enrollment in Imperial County was approximately 35,720 students, and had increased 1.1% on average since the 1993-1994 school year (CDOE 2005).

El Centro Elementary School District imposes school impact fees of \$0.25 per square foot of commercial or industrial space (PL 2005). Central Union High School District imposes school impact fees of \$0.11 per square foot of commercial or industrial space (Vogel 2005).

Higher or occupational education facilities include Imperial Valley College, Imperial Valley Regional Occupational Program, and the Imperial Valley Campus of San Diego State University (ICCED 2003).

#### ***6.12.4.4 Medical Facilities***

The two hospitals located in Imperial County are the El Centro Regional Medical Center (4 miles southwest of the site) and Pioneers Memorial Hospital (14 miles north of the site, in Brawley). The El Centro Regional Medical Center has 165 beds, and Pioneers Memorial Hospital has 99 beds. The next closest hospital is the Yuma Regional Medical Center in Yuma, Arizona (60 miles east of the Project Site).

As stated in Section 6.12.1.4.1, Fire Protection and Emergency Response, ambulance service is provided by Gold Cross Ambulance, located in El Centro. Other health services provided in Imperial County include behavioral health services, child support services, general health services, social services, and the IC Children and Families Commission (ICCED 2005). In addition, medical facilities near the Project Site include those listed in Section 6.8, Public Health and Safety.

#### ***6.12.4.5 Utilities***

The City of El Centro Public Works department maintains city streets, solid waste management systems, and is also responsible for the operation and maintenance of the water and WWTP facilities.

SCGC provides natural gas service to the City of El Centro, including the ECGS Site. IID provides electricity to the City of El Centro.

### **6.12.5 Public Finance and Fiscal Issues**

The Project Site is located within the City of El Centro in Imperial County. In 2000, total taxable sales in Imperial County were approximately \$1,403 million, and total taxable retail sales

the same year were \$940 million.<sup>11</sup> Imperial County's taxable sales represented 0.3% of the state's taxable sales (CDOF 2005a). The sales and use tax rate (includes state, local, and district) is 7.75% (CBOE 2005).

Imperial County's total assessed value was \$7.784 billion in fiscal year 2004-2005. Taxes were collected on assessed value of non-exempt properties, that is, on the net assessed value of \$7.476 billion (Buckner 2005). The average Imperial County property tax rate is approximately 1.15% (Buckner 2005). Applying the average property tax rate to the net assessed value, property taxes collected for the fiscal year 2004-2005 were approximately \$86.0 million.

The Project Site is located on parcel number 044-430-008, owned by IID, and valued by the Imperial County Assessor at \$316,601 for the land, and an additional \$7.9 million for the structure. Parcel number 044-430-008 is exempt from property taxes (Araujo 2005). IID does not currently pay property tax or payments in lieu of taxes on this parcel.

The parcel is located within Tax Rate Area (TRA) 004-000. Within this TRA, property taxes are collected at a rate of 1.1352% per \$100 in assessed value. The first 1.0% of tax collected is distributed among the County General Fund, the Central Valley Cemetery District, the City of El Centro, Imperial Community College, Central Union High School District, El Centro Elementary District, and seven entities that are part of the County Office of Education. The remaining 0.1352% goes toward payment of unpaid bonds for the Central Union High School District and the El Centro Elementary District (Chu-Longoria 2006).

The Imperial County 2004-2005 Approved Budget identifies Imperial County as a growth area, challenged with balancing operational needs with available financing. Total budget appropriations and expenditures for this budget were \$254.2 million, representing a 12.4% increase when compared to the prior fiscal year's actual budget. Top appropriation categories are public assistance (35%), public protection (24%), and general government (20%). Top expenditures categories are salaries and benefits (40%) and services and supplies (37%) (Table 6.12-8, Imperial County 2004-2005 Adopted Budget Appropriations and Expenditures).

**TABLE 6.12-8**  
**IMPERIAL COUNTY 2004-2005 ADOPTED BUDGET**  
**APPROPRIATIONS AND EXPENDITURES**

Appropriations		Expenditures	
Function	Percent of Total Appropriations	Budget Class	Percent of Total Expenditures
General Government	20	Salaries and Benefits	40
Public Protection	24	Services and Supplies	37
Public Ways and Facilities	7	Other Charges	19
Health and Sanitation	14	Capital Assets	4
Public Assistance	35	Contingencies	0
Education	1	Other Financing Sources	-1
Recreation	0	Transfers	0

<sup>11</sup> 2000 figures were used as they were the most recent available from the Department of Finance.

**TABLE 6.12-8  
IMPERIAL COUNTY 2004-2005 ADOPTED BUDGET  
APPROPRIATIONS AND EXPENDITURES**

Appropriations		Expenditures	
Function	Percent of Total Appropriations	Budget Class	Percent of Total Expenditures
Contingency	0	-	-
Special District	0	-	-

Source: Imperial County Budget (ICB) 2005.

Notes:

- = none

The total additional financing listed in the 2004-2005 Approved Budget of \$243.7 million, added to the fund balance of \$41.5 million, results in a total available amount of \$285.2 million. General Fund revenues account for 60% (\$156.1 million) of this total amount. The categories of loss reserve medical plans, public works road construction and maintenance, and loss reserve workers compensation each contribute between 5.0 and 7.0% of the total, and the remaining categories each contribute less than 3.0% (Table 6.12-9, Imperial County 2004-2005 Adopted Budget General Fund).

**TABLE 6.12-9  
IMPERIAL COUNTY 2004-2005 ADOPTED BUDGET GENERAL FUND**

Source	Percent of Estimated Additional Financing <sup>1</sup>
Current Taxes	13
Licenses, Permits	1
Fines, Forfeits and Penalties	2
Revenue for Use Money Prop	1
Intergovernmental Revenue	44
Federal Revenues	23
Charges for Services	16
Miscellaneous Revenues	0

Source: Imperial County Budget (ICB) 2005.

Notes:

<sup>1</sup> Estimated Additional Financing is the "new" amount of financing for the fiscal year, not including the General Fund balance. For this fiscal year, the estimated additional financing represented 98% of the total General Fund amount.

Top categories contributing to General Fund revenue are intergovernmental revenue (44%), federal revenues (23%), charges for services (16%), and current taxes (13%) (ICB 2005).

Total revenues and expenditures for the City of El Centro 2006 budget were \$77.3 million, representing a 46% increase when compared to the prior fiscal year's actual budget. Top revenue categories are long-term debt (24%), utilities (18%), and other agencies (16%). Top expenditure categories are enterprise (47%), public safety (18%), and public works (13%) (Table 6.12-10, City of El Centro 2006 Budget Revenues and Expenditures).

**TABLE 6.12-10  
CITY OF EL CENTRO 2006 BUDGET REVENUES AND EXPENDITURES**

Revenue Category	Percent of Total	Expenditure Category	Percent of Total
Reserves	5	Community Development	10
Utilities	18	Parks and Recreation	3
Interest	0	Enterprise	47
Long Term Debt	24	Public Works	13
Development Fees	4	Public Safety	18
Grants	10	General Government	3
Fees	11	Other	6
Other Agencies	16	-	-
Other Taxes	2	-	-
Sales and Use Tax	8	-	-
Property Taxes	2	-	-
Total	\$77.3 million		\$77.3 million

Source: Obeso 2006.

Notes:

- = none

General Fund revenues account for approximately 26% (approximately \$20 million) of the total budget for the City of El Centro. Top categories contributing to General Fund revenue are sales tax (32%), other agencies (14%), property taxes (11%), and motor vehicle in-lieu taxes (11%) (Table 6.12-11, City of El Centro 2006 Budget General Fund).

**TABLE 6.12-11  
CITY OF EL CENTRO 2006 BUDGET GENERAL FUND**

Source	Percent of Total
Interfund Transfers	7
Sales Taxes	32
Property Taxes	11
Other Taxes	9
Motor Vehicle In-Lieu Taxes	11
Fines	1
Licenses and Permits	2
Other Agencies	14
Charges for Current Services	9
Other	4

Source: Obeso 2006.

### 6.12.6 Environmental Consequences

#### *6.12.6.1 Significance Criteria*

The criteria used in determining whether Project-related socioeconomic impacts would be significant are presented in Appendix G of CEQA Guidelines. Impacts attributable to the Project are considered significant if they would:

- Induce substantial growth or concentration of population
- Induce substantial increases in demand for public services and utilities
- Displace a large number of people
- Disrupt or divide the physical arrangement of an established community
- Result in substantial long-term disruptions to businesses

### 6.12.7 Discussion of Assumptions and Selected Impacts

To the extent practicable, the Applicant has committed to give local preference in hiring and procurements. However, the assumptions in the socioeconomic impact analysis (related to hiring labor and purchasing materials) imply that a small portion of labor and materials purchases would occur outside of Imperial County. The estimated worst-case assumptions are used for the purpose of approximating a conservative scenario under which socioeconomic impacts, including population and public services impacts, could be evaluated.

### 6.12.8 Economic Impacts

#### *Construction*

The construction period would last 20 months, beginning in September 2007. Commercial operation of the Project is scheduled for May 2009. The Project would be owned and operated by IID, and would utilize existing infrastructure within the ECGS Site and staffing at the ECGS. Construction activities would primarily occur on the west side of the existing steam turbine building, although some construction would occur to the north and east, associated with constructing the overhead 92 kV interconnect from the CTG GSU to the El Centro Switching Station. All construction activities would occur within the ECGS Site boundaries. Construction vehicle access would be from East Villa Avenue. No new buildings are part of the Project.

Construction employment would peak during month 10 at 98 workers, and averaging 73 workers over the 20-month construction period. Workers are expected to originate from Imperial County, San Diego County, and Riverside County. For the purposes of the impact analysis, 40% of the workers are assumed to originate from Imperial County, 30% from San Diego County, and 30% from Riverside County. Table 6.12-12, Construction Employment, shows construction labor by month for the Project.

# SECTION SIX

## Socioeconomic Resources

TABLE 6.12-12  
CONSTRUCTION EMPLOYMENT

Job Category/ Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Boilermakers								4	8	12	12	12	12	8	4					
Carpenters	4	4		4	8	12	12	12	12	12	8	8	4	2	2	2	2			
Cement Finishers	2	2				4	8	12	12	8	4	4								
Electricians				2	4	6	6	4	4	8	12	12	12	12	8	6	4	4	2	2
Insulation Workers												2	4	8	12	12	8	4	2	2
Iron Workers	2	2		4	8	12	12	12	12	12	12	12	12	8	6	4	2	2		
Laborers	2	2	2	4	8	12	12	12	12	12	12	12	12	12	12	8	4	2	2	2
Millwrights				2	4	4	2	2	4	8	8	4	4							
Operators	2	2	2	4	4	6	8	8	8	4	4	4	2	4	4	4	4	2	2	2
Painters																				
Pipefitters				4	8	8	4	4	8	8	12	12	12	8	8	8	4	2	2	2
Lineman		8	8	2																
Craft Subtotal	12	20	12	26	44	64	64	70	80	84	84	82	74	62	58	52	40	30	18	14
Management	1	1	1	2	2	4	4	4	4	4	4	4	4	4	4	4	4	4	2	2
Engineering	1	1	1	4	4	6	6	6	6	8	8	8	8	8	6	6	4	4	2	2
Document Control	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Commissioning													2	4	8	8	8	8	8	4
Staff Subtotal	3	3	3	8	8	12	12	12	12	14	14	14	16	18	20	20	18	18	14	10
Project Total	15	23	15	34	52	76	76	82	92	98	98	96	90	80	78	72	58	48	32	24

Average Labor Force: 73

Peak Labor Force: 98

Peak construction employment would represent approximately 6.5% of construction jobs in Imperial County (CEDD 2005a; Mason 2005). Construction employment for the Project is a small portion of this employment.

Given the available construction labor force in Imperial County and adequate available housing within the City of El Centro and neighboring cities for labor forces relocating from San Diego and Riverside counties, it is expected that 95% of the construction work force would commute to the Project Site from within Imperial County. During the construction period, the construction workers would commute from either their permanent residences or temporary lodging in which they stay during the workweek.

For purposes of this analysis, the cost of construction of the Project is assumed to be \$73.5 million.<sup>12</sup> The total payroll for construction of the Project is projected to be \$18.4 million (25% of construction cost). The remaining cost of construction, \$55.1 million, is the cost of equipment, materials, supplies, engineering, fees, insurance, taxes, administrative cost, and other direct costs. Gravel and concrete would likely be purchased within Imperial County. To the extent practicable, other building materials and supplies such as scaffolding, insulation, and paint would be purchased locally. Otherwise, these supplies would be purchased in the San Diego-Riverside-Imperial County area.

Businesses in El Centro would experience impacts due to construction nuisances (noise, dust, traffic). See Section 6.7, Noise, for information on noise impacts from construction and Section 6.9, Traffic and Transportation, for information on traffic impacts related to Project construction and operation. Although trucks would pass through business and populated areas, they would not likely disrupt employee or customer traffic or disturb local businesses, nor would they typically pass through business areas at hours other than daytime hours. Coming from and going to the Project Site, construction traffic would take Interstate 8 to South Dogwood Road to avoid the residential area to the west of the Project Site.

### *Indirect and Induced Economic Impacts from Construction*

Construction activity would result in secondary economic impacts (indirect and induced impacts) that would occur within Imperial County. Secondary employment effects would include indirect employment due to the purchase of goods and services by firms involved with construction, and induced employment due to construction workers spending their income in their local area. Similarly, indirect and induced income and spending effects also occur as “ripple” effects from construction. Tax impacts attributable to construction costs would accrue to local governments, and would result in indirect and induced tax impacts. Indirect and induced impacts were estimated using IMPLAN<sup>®</sup> economic modeling software (IMPLAN 1997), an input/output model specific for Imperial County.<sup>13</sup> Estimated indirect and induced effects of construction that

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<sup>12</sup> Construction capital costs, including cost of labor, are 2006 dollars.

<sup>13</sup> IMPLAN Professional Version 2.0, copyright Minnesota IMPLAN Group, 1997.

would occur within Imperial County would be an additional 58 jobs,<sup>14</sup> \$1.7 million in labor income, and approximately \$4.9 million in output.<sup>15</sup>

### *Operation*

The Project is scheduled for commercial operation by May 2009. Operation would require no additional employees. Annual operation costs for the Project (excluding fuel costs) would be approximately \$3,500,000, 70% for recurring operation and maintenance and 30% for an annual allocation of major maintenance costs. Approximately 20% of this non-labor annual operation cost (\$700,000) would be spent in Imperial County each year.<sup>16</sup>

Operation of the Project would not result in any long-term disruption to an established community or in a substantial long-term disruption to businesses. Although both residences and businesses are located near the existing ECGS, the Project would occur completely within the ECGS Site.

### *Indirect and Induced Economic Impacts from Operation*

Similar to construction, operation of the Project would result in indirect and induced economic impacts that would occur within Imperial County. Indirect and induced impacts were estimated using IMPLAN (1997), and are based on the direct economic costs of operation of the Project. Unlike indirect and induced impacts from construction, indirect and induced impacts from operation would represent *permanent* increases in area jobs, income, and spending; but would still lag behind direct effects by approximately 6 to 12 months.<sup>17</sup> Estimated indirect and induced effects of annual operation that would occur within Imperial County would be approximately 1.5 jobs, \$40,000 in labor income, and \$120,000 in output.<sup>18</sup> These indirect and induced effects would “ripple” through the economy and would occur in various industries.

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<sup>14</sup> The multiplier for employment for the Project is higher than the unadjusted industry model for Imperial County because for the Project, the earning per worker and output per worker is higher than the industry standard for the county.

<sup>15</sup> Output includes spending for materials and supplies (non-labor costs), plus value added, which comprises employee compensation, proprietary income, other property income, and indirect business taxes. IMPLAN sector number 45 (“other maintenance and repair construction”) was used for this analysis and includes economic activity such as construction of power plants, transmission lines, and pipelines. Secondary labor income and output impacts are 2006 dollars.

<sup>16</sup> Annual operation costs are 2006 dollars.

<sup>17</sup> Fuel costs were not included in the IMPLAN model because the prices for these costs are variable and unknown, and the spending would not occur in Imperial County.

<sup>18</sup> IMPLAN Professional Version 2.0, copyright Minnesota IMPLAN Group, 1997. Output includes spending for materials and supplies (non-labor costs), plus value added, which comprises employee compensation, proprietary income, other property income, and indirect business taxes. IMPLAN sector number 30 (“power generation and supply”) was used for this analysis. Secondary labor income and output impacts are 2006 dollars.



**6.12.9 Population and Housing Impacts***Construction*

A portion of the approximately 44 workers originating from San Diego and Riverside counties would commute to the Project Site on a weekly basis and stay in temporary housing during the week. Assuming that half of the workers share lodging (two workers per room), demand would exist during the construction period for approximately 33 hotel rooms or recreational vehicle spaces. Workers would not likely move to Imperial County or bring families with them due to the relatively short duration of the construction period. The available temporary housing in El Centro would be adequate to meet the demand for temporary housing during construction. The City of El Centro has approximately 700 hotel rooms.

Construction of the Project would not cause any substantial permanent population increases or changes in concentration of population due to the temporary nature of construction.

Construction workers would be a temporary addition to the Imperial County population during the week, especially during the peak period. Housing demand would not increase due to construction of the Project.

*Operation*

Population or housing impacts associated with operation would not occur. Operation would require no additional workers. Operation of the Project would not induce substantial growth or concentration of population or substantial increases in demand for housing. Displacements would not occur as a result of this Project, nor would housing demand increase due to Project operation.

**6.12.10 Public Services and Utilities***6.12.10.1 Fire Protection and Emergency Response*

The ECFD would provide fire protection and emergency response services to the site during construction and operation. Also, a fire protection system will be included in the Project design. The Project would use the existing raw water, demineralized water, potable water, wastewater, oily water, stormwater, sanitary sewer, and compressed air systems already in place at ECGS. The Project would also use the existing fire protection and alarm systems. The fire water loop would be extended.

During construction and operation, emergency services would be coordinated with the local fire department and hospital.

The Project will build upon the existing fire protection and alarm systems common to the ECGS. As part of the Project, an additional fire hydrant will be provided to the south of the Unit 3 CTG. In addition, a fire main will be added within the Steam Turbine Building on the east side. This new fire main will supply hose reels on both the ground floor and turbine operating level. The new CTG enclosures are protected by a CO<sub>2</sub> based fire suppression system as supplied by the manufacturer. This system includes heat and gas detection devices to provide reliable and safe operation. The new oil-filled transformers are isolated from adjacent equipment and structures using physical separation and/or separation walls. The new auxiliary transformers are supplied

with approved less-hazardous dielectric fluids. Additionally, each new transformer will reside within a concrete containment that serves to:

- Contain any spills
- Retain direct contact storm water that may potentially come in contact with transformer oil
- Retain fire water that would have come in contact with transformer oil

The fire protection system is summarized in Table 6.12-13, Fire Protection Systems Design Conditions.

**TABLE 6.12-13  
FIRE PROTECTION SYSTEMS DESIGN CONDITIONS**

Location	Type of System
Buildings (Existing)	Hose stations will be provided in the east side of the turbine building as an upgrade. The fixed fire systems will be provided as required by local jurisdiction or Uniform Building Code (UBC).
Combustion Turbine/Generators	CO <sub>2</sub> System as defined per NFPA will be provided for the combustion turbine/generators by GE.
Transformers (New)	Separation.
Outside Areas	A new wet barrel type fire hydrant will be designed, and installed south of the new CTG/HRSR as developed in conjunction with the City of El Centro Fire Marshall.

Notes:

CO<sub>2</sub> = carbon dioxide

GE = General Electric

NFPA = National Fire Protection Association

The fire protection system would be designed per California Fire Code requirements and NFPA standards, utilizing equipment approved by Underwriters Laboratories and Factory Mutual and California State Fire Marshal. The local Fire Chief would review final fire protection design and perform any required inspections during construction of the Project.

The enclosures around the CTG are protected by a CO<sub>2</sub>-based fire suppression system, as supplied by the CTG manufacturer. This system includes heat and gas detection devices.

The new oil-filled GSU transformer would be physically separated from adjacent equipment and structures.

The public fire protection system, together with the on-site system, would be adequate to serve the Project during construction and operation (Reel 2006).

#### **6.12.10.2 Law Enforcement**

The ECPD would provide law enforcement services to the Project. The ECPD is adequate and has sufficient resources to provide law enforcement services to the Project, during construction and operation (Merideth 2006).

Existing on-site security is provided by the Applicant as part of the ECGS Site, to assist with law enforcement during Project operation. The entire ECGS Site is enclosed by an 8-foot tall security fence. Access to the Project Site is controlled by security gates.

### **6.12.10.3 Schools**

Schools would not experience any meaningful impact during construction, as any population increase would be small and temporary, and would not likely involve school-age children. During operation, schools would not be affected because no new employees would be added.

### **6.12.10.4 Medical Facilities**

The medical facilities listed in Section 6.12.4.4, Medical Facilities, could accommodate the temporary increase in demand for services associated with the construction workforce. In addition, see Section 6.8 for a discussion of Public Health and Safety. No permanent increase in demand for medical facilities would occur because no operation employees would be added as part of the Project.

### **6.12.10.5 Utilities**

IID will provide electricity to the Project Site during construction and operation. During construction, IID will provide temporary utility services for the construction trailers, laydown area, and construction area. SCGC will continue to provide natural gas to ECGS throughout construction and operation.

The new equipment will be slightly elevated above the existing grade to allow stormwater to flow away from the equipment and to maintain the existing stormwater drainage paths.

The Project will utilize existing ECGS auxiliary systems for potable water, raw water, fire water, demineralized water, anhydrous ammonia, fuel gas, compressed air, and sanitary sewer systems. No new sources of potable water will be needed, nor will any new sanitary facilities be required.

The existing ECGS fire system was recently reviewed by the local fire department. As part of that review and inspection, it was determined that the only upgrade that may be required as part of the Project will be to add an additional fire hydrant.

### **6.12.11 Fiscal Impacts**

After construction, the assessed value of the property could increase by the estimated value of the improvements. Facility construction would add approximately \$73.5 million to the current assessed value of \$8.2 million (land and structure), for an estimated new assessed value of approximately \$81.7 million for the land, existing structures, and the Project structures. This represents up to 1.1% of the total assessed value in Imperial County in fiscal year 2004-2005.

The school impact fees of approximately \$1,980 would be one-time revenue increases for the school districts.

The Applicant does not currently pay property taxes or payments in lieu of taxes on the parcel, and would continue this arrangement during construction and operation of the Project.

Sales tax revenues accruing to Imperial County would increase due to the taxable Project construction costs of \$69.0 million. The one-time influx of sales tax revenue due to Project construction costs will be approximately \$5.4 million, which represents an increase of approximately 5.0% compared to the sales tax revenue accrued by Imperial County in 2000.

Sales tax revenues could also increase slightly due to increased retail sales in the area (e.g., gas and food from construction worker purchases and from the small amount of supplies purchased locally). However, the increased revenues will not likely constitute a substantial increase relative to total county revenues.

### 6.12.12 Environmental Justice

The CEC process requires a discussion of the potential for disproportionate impacts from the Project on minority or low-income people (Section 2022[b][4]). Additionally, Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority and Low-Income Populations*, signed by President Clinton on February 11, 1994, requires federal government agencies to identify and address disproportionately high and adverse effects of federal action on the health or environment of minority and low-income populations. The USEPA has published several guidelines for addressing Environmental Justice issues, including *Draft Title VI Guidance for EPA Assistance Recipients Administering Environmental Permitting Programs* and *Draft Revised Guidance for Investigating Title VI Administrative Complaints Challenging Permits* (USEPA 2000). This analysis uses the federal guidelines to analyze potential Environmental Justice impacts, including two steps. First, this analysis evaluates whether the potentially affected community includes minority or low-income population. If so, the second step is to determine whether potential environmental impacts attributable to the Project would fall disproportionately on minority and low-income residents of the community. The CEC uses 50% minority or low-income as a threshold for identifying geographic areas that are “minority” or “low-income.”

Fourteen census tracts fall within a 6-mile radius of the Project Site. The population within the 14 census tracts is 79% minority and therefore falls above the threshold of 50%, and is identified as a “minority” community. Populations within census tracts 112.02, 113, 114, 115, 116, and 119 are higher minority than the average for the group of census tracts. These five census tracts are located in the center and in the southeast portion of the 6-mile radius area surrounding the Project Site. In comparison to larger geographic areas around the site, the group of census tracts has a lower minority percentage when compared to the City of El Centro (82%), lower when compared to Imperial County (80%), and higher when compared to the state (53%) (Table 6.12-14, Race and Poverty Data). Because a portion of the population near the Project Site is identified as “minority,” the Project could potentially affect minority populations.

**TABLE 6.12-14  
RACE AND POVERTY DATA**

Area	Population	Minority Population		Percentage Living Below Poverty Level	
		Number	Percent	Number	Percent
Census Tracts within 6-Mile Radius					
Census Tract 108	1,439	678	47	232	16
Census Tract 110	7,833	5,108	65	982	13
Census Tract 111	3,651	2,451	67	623	17
Census Tract 112.01	3,378	2,334	69	195	6
Census Tract 112.02	4,731	4,057	86	1,262	27

**TABLE 6.12-14  
RACE AND POVERTY DATA**

Area	Population	Minority Population		Percentage Living Below Poverty Level	
		Number	Percent	Number	Percent
Census Tract 113	6,658	5,969	90	1,280	22
Census Tract 114	4,212	4,129	98	1,699	40
Census Tract 115	6,648	6,063	91	2,312	38
Census Tract 116	6,976	5,814	83	1,921	28
Census Tract 117	5,260	4,134	79	324	6
Census Tract 118.01	3,266	2,054	63	41	1
Census Tract 118.02	4,968	3,331	67	551	12
Census Tract 118.03	1,239	663	54	56	4
Census Tract 119	3,938	3,745	95	637	16
Group of Census Tracts	64,197	50,530	79	12,115	19
<b>Nearby Towns/Cities</b>					
City of El Centro	37,835	30,998	82	8,405	23
<b>County and Nearby Counties</b>					
Imperial County	142,361	113,593	80	29,681	23
Riverside County	1,545,387	756,556	49	214,084	14
San Diego County	2,813,833	1,265,000	45	338,399	12
State of California	33,871,648	18,054,858	53	4,706,130	14

Source: Census 2005b.

Notes:

For the purpose of this analysis, minority races include White Hispanic, Black or African American, American Indian and Alaska Native, Asian, Native Hawaiian and Other Pacific Islander, and all other races.

Poverty status was determined by dividing the population living below poverty by the population for whom poverty status is determined, which excludes those living in institutional housing.

The population within the fourteen census tracts is 19% below poverty, and therefore below the threshold of 50%, and is not identified as a “low-income” community. In comparison to larger geographic areas around the site, the group of census tracts has a lower minority percentage when compared to the City of El Centro (23%), lower when compared to Imperial County (23%), and higher when compared to the state (14%) (Table 6.12-14, Race and Poverty Data).

Typical Environmental Justice concerns for a Project of this nature are residential or business displacements, water quality, noise, and air quality impacts. No residential or business displacements would occur due to the Project. Based on the findings of no significant impacts in the areas of water resources, noise, and air quality resources, environmental justice impacts are unlikely to occur.

The Project would have no significant impacts to water resources. In terms of noise impacts, the design of the Project would not result in significant adverse construction impacts or significant adverse impacts during operation.

The SPPE finds that the contribution of the Project to the existing air quality around the City of El Centro would not be significant. The contribution of Project sources to local pollutant levels would be very small compared with the ambient air quality standards. Except for PM<sub>10</sub> and PM<sub>2.5</sub>, maximum predicted concentrations when the Project becomes operational would be below the standards. The increase in emissions associated with the Unit 3 Repower Project would be partially offset by the reduction in emissions resulting from retirement of the existing Unit 3 boiler, with any residual emissions increases of nonattainment pollutants or their precursors being offset with ERCs.

According to the Imperial County Office of Environmental Health (Johnston 2005), no health studies have been performed for the Imperial County population or for specific populations within Imperial County that pertain to environmental health issues, including but not limited to water and air quality.

An Environmental Data Resources Inc., environmental database search (EDR 2006) showed 130 locations within 5 miles<sup>19</sup> of the Project Site that are listed on national or California state environmental databases. No properties within 5 miles were listed on the USEPA National Priority List. The closest of these 130 locations include 15 locations between 0.5 and 1.0 mile, generally in the south quadrant surrounding the Project. These locations include the following, which total more than 15 because: (1) some locations have more than one site, and (2) some sites are listed on more than one database:

- Nine Resource Conservation and Recovery Act (RCRA) sites
- Five Emergency Response Notification System sites
- Fourteen Facility Index System sites
- Four California Water Resources Control Board sites
- Thirteen sites identified as public drinking water wells with detectable levels of contamination, hazardous substance sites selected for remedial action, sites with known toxic material identified through the abandoned site assessment program, sites with underground storage tanks having a reportable release, and all solid waste disposal facilities from which there is known migration
- Twenty leaking underground storage tank sites
- Five Facility Inventory Database underground storage tank sites
- Two California RWQCB sites
- One underground storage tank site
- Nineteen historic underground storage tank sites
- Four aboveground storage tanks

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<sup>19</sup> Five miles was used rather than 6 miles (as required by CEC) because a 5-mile query is standard for Environmental Data Resources, Inc. To supplement this data to include up to a 6-mile radius, discussions were held with the ICAPCD (Ramirez 2006) to identify major pollution sources between 5 and 6 miles from the site. This supplemental information is presented in this section.

- Six statewide Environmental Evaluation and Planning System underground storage tank sites
- Six California Hazardous Materials Incident Report System sites
- One Notify 65 site, which means that this site record contains facility notifications about any release that could impact drinking water and thereby expose the public to a potential health risk
- One voluntary cleanup program site, which means that this site contains low threat level properties with either confirmed or unconfirmed releases
- Two dry cleaners sites
- Thirty-nine sites on the Hazardous Waste Manifest
- Three manufactured gas plants

The 15 locations identified in the EDR database search are identified in Figure 6.12-1, Minority Populations and Persons Living Below Poverty within Six-Mile Radius of the Project.

In order to supplement the 5-mile study to include the area between 5 and 6 miles, the Imperial County Air Pollution Control District (APCD) (Ramirez 2006) was consulted. The APCD identified two major sources of pollution within 6 miles of the Project. They include the Imperial Landfill, located on Robinson approximately 0.5 miles east of Dogwood, northeast of the Project; and the Kinder Morgan tank farm, located on Atin Road between Clark Road and Highway 86, northwest of the Project (Ramirez 2006).

Although potential Environmental Justice communities exist within 6 miles of the Project Site, (as discussed above in this section), the Project's impacts would not be significant. Therefore, no environmental justice impacts would occur.

### **6.12.13 Cumulative Impacts**

In the City of El Centro, 76 residential, 10 commercial, and six industrial Projects are proposed. The proposed residential Projects include over 38,000 units. This and other development activity in the area would be accompanied by transportation and other infrastructure improvements to support the additional population and employment associated with this new development.

To the extent that construction Projects occur simultaneously, demand for labor could increase. The size of the combined labor pool in Imperial County, San Diego County, and Riverside County would be adequate to meet this demand. Although these proposed development projects in the City of El Centro could increase permanent population and demand for services in Imperial County, the Project will result in no new permanent employees, and would therefore not add to the cumulative impact of population growth and related increase in demand for services.

### **6.12.14 Mitigation Measures**

The Project would result in beneficial economic effects to Imperial County. No significant adverse impacts were identified. Therefore, no mitigation measures are necessary.

## 6.12.15 Laws, Ordinances, Regulations, and Standards

No specific federal statutes, ordinances, or regulations apply to socioeconomic impacts. California State Planning Law (Government Code Sections 65302 et seq.) requires that each city and county adopt a General Plan, consisting of seven mandatory elements, to guide planning and development within the jurisdiction. Most jurisdictions do not have laws, ordinances, or regulations specifically addressing the socioeconomic aspects of a Project.

As stated in Section 6.12.3, Population and Housing, Executive Order 12898 *Federal Actions to Address Environmental Justice in Minority and Low-Income Populations* (1994) requires federal government agencies to identify and address disproportionately high and adverse effects of federal action on the health or environment of minority and low-income populations. USEPA has adopted the Executive Order, and the California Environmental Protection Agency has established a working group for Environmental Justice concerns. The CEC receives federal funding and therefore must address Environmental Justice concerns associated with Projects under its permitting jurisdiction. Environmental Justice concerns related to the Project are addressed in Section 6.12.12, Environmental Justice.

## 6.12.16 Involved Agencies and Agency Contacts

Various public service agencies were contacted in the course of the socioeconomic investigation to check on levels of activity and expected impacts of the Project. Table 6.12-15, Involved Agencies and Agency Contacts, lists such agencies.

**TABLE 6.12-15**  
**INVOLVED AGENCIES AND AGENCY CONTACTS**

Issue	Agency/Address	Contact/Title	Telephone
Fiscal Resources	Imperial County Assessor's Office 940 W. Main Street El Centro, CA 92243	Irma Araujo Roy Buckner	(760) 482-4244
Fiscal Resources	Imperial County Auditor's Office 940 W. Main Street El Centro, CA 92243	Mary Ann Chu-Longoria	(760) 482-4556
Fiscal Resources	City of El Centro 1275 Main Street El Centro, CA 92243	Yvonne Obeso	(760) 337-4573
Fire Protection and Emergency Response	City of El Centro Fire Department 775 State Street El Centro, CA 92243	Tim Reel, Battalion Chief	(760) 337-4530
Law Enforcement	City of El Centro Police Department 150 North 11 <sup>th</sup> Street El Centro, CA 92243	Ron Merideth, Lieutenant	(760) 352-2111
Labor	California Employment Development Dept. Labor Market Information Div. 7000 Franklin Blvd., Suite 1100 Sacramento, CA 95823	Cheryl Mason, Labor Market Consultant for Imperial County	(858) 689-6544
Utilities	Imperial County Department of Environmental Health Services 940 W. Main Street El Centro, CA 92243	Mark Johnston	(760) 482-4203



**TABLE 6.12-15  
INVOLVED AGENCIES AND AGENCY CONTACTS**

Issue	Agency/Address	Contact/Title	Telephone
Schools	Calipatria Unified School District 501 W. Main Street Calipatria, CA 92233	Lori Wigg	(760) 348-2892
Pollution Sources	Imperial County Agricultural Commission – Air Quality 150 S. Ninth Street El Centro, CA 92243	Jesus Ramirez	(760) 482-4314

## 6.12.17 Permits Required and Permit Schedule

There are no permits to protect socioeconomic values, as such. See Sections 6.2, Land Use; and 6.8, Public Health and Safety, for permits relating to land use and public health and safety issues.

## 6.12.18 References

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FIGURE 6.12-1

